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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/967,126	09/28/2001	Victor Key Pecone	4430-29	4944

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EXAMINER

VO, TIM T

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/967,126

Applicant(s)

PECONE, VICTOR KEY

Examiner

Tim T. Vo

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/9/05; 5/25/05; 6/10/05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **Part III DETAILED ACTION**

#### ***Notice to Applicant(s)***

This application has been examined. Claims 1-22 are pending.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-17 are rejected under 35 U.S.C. § 102(b) as being anticipated by Smith patent number 5,590,377 referred hereinafter "Smith".

As for claim 11, Smith teaches a method for sharing data between a first controller memory module and a second controller memory module (see figure 2, DMA 215-280), comprising: providing a first shared path in a first channel interface module (see figure 2, primary PCI bus 240, secondary PCI bus 262), wherein the shared path has a switchable component for determining which data is to be routed over the shared path (see figure 2, primary PCI bus 240, secondary bus 262, bridge 260 and column 8 lines 20-30, wherein the central DMA 215 determining which channel and routes selected data such as: base address, count data and data to be stored in the mode register. The central DMA 215 then selects the channel number and routes these

selected data via the primary PCI bus 240, secondary PCI bus 262 to the slave DMA 280); a direct memory access engine for each of said first and second controller memory modules (see figure 2, DMA 215-280); and transferring first data between said first controller memory module and said second controller memory module using said direct memory access engine for at least one of the first and second controller memory modules, wherein the switchable component provides passage of the first data over the first shared path between the first and second controller memory modules (see figure 2, DMA 215-280 and see figure 2, primary PCI bus 240, secondary bus 262, bridge 260 and column 8 lines 20-30, wherein the central DMA 215 determining which channel and routes selected data such as: base address, count data and data to be stored in the mode register. The central DMA 215 then selects the channel number and routes these selected data via the primary PCI bus 240, secondary PCI bus 262 to the slave DMA 280).

As for claims 12, 15 and 18-20, Smith teaches providing a second shared path in a second channel interface module (see figure 2, DMA 215, 280, 298); and transferring second data between said first controller memory module and said second controller memory module using each of said direct memory access engines, wherein the second data passes through said second shared path (see figure 2, bus 216, DMA 212-213).

As for claims 13, 16-17 and 22, Smith teaches connecting said first and second channel interface modules and said first and second controller memory modules to a passive backplane (see figure 2).

As for claims 14 and 21, Smith teaches an apparatus for sharing data between a first controller memory module and a second controller memory module, comprising: at least a first channel interface module having a first shared path (see figure 2, bus 240, 262), wherein the shared path has a switchable component, operably associated therewith, for selecting which data is to be routed on the shared path (see figure 2, DMA 215-280 and see figure 2, primary PCI bus 240, secondary bus 262, bridge 260 and column 8 lines 20-30, wherein the central DMA 215 determining which channel and routes selected data such as: base address, count data and data to be stored in the mode register. The central DMA 215 then selects the channel number and routes these selected data via the primary PCI bus 240, secondary PCI bus 262 to the slave DMA 280);

a first controller memory module including a first direct memory access engine (see figure 2, DMA 215); a second controller memory module including a second direct memory access engine (see figure 2, DMA 280); and a communications interface to permit direct communications between said first and second controller memory modules (see figure 2, bus 240, 262); wherein data is transferred between said first and second controller memory modules using at least one of said first and second direct memory access engines and the switchable component of said first shared path (see figure 2, DMA 215-280 and see figure 2, primary PCI bus 240, secondary bus 262, bridge 260 and column 8 lines 20-30, wherein the central DMA 215 determining which channel and routes selected data such as: base address, count data and data to be stored in the mode register. The central DMA 215 then selects the channel number and routes these

selected data via the primary PCI bus 240, secondary PCI bus 262 to the slave DMA 280).

### ***Allowable Subject Matter***

Claims 1-10 are allowable over the prior of records.

### ***Examiner's Statement of Reasons for Allowance***

The following is an Examiner's statement of reasons for the indication of allowable subject matter: Claims 1-10 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior arts. As for claim 1, prior art fails to teach at least first and second channel interface modules, connected to the passive backplane, that communicate with the channel interface modules via the passive backplane, and that store and process the storage transferred to and from the channel modules. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim T. Vo whose telephone number is 571-272-3642. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3672. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



8/3/05

Tim T. Vo  
Primary Examiner  
Art Unit 2112